

REMARKS

Claims 1, 5 and 8-28 remain in this application for examination.

Drawings:

Formal Drawings are attached hereto.

Related Patent Applications:

Applicant has amended the specification to refer to U.S. Patent 6,350,379 and U.S. Patent 6,423,225.

Specification:

The specification has been amended to recite that the second deflector is a centrifugal separator.

Claim Rejections Under 35 U.S.C. §112, first paragraph:

The term "centrifugal separator" has been placed in the specification to clearly identify the centrifugal separator set forth in the claims. Since both the Claims and the Abstract of the Disclosure are part of the specification, the concept of a centrifugal separator was included in the specification as filed.

Claim Rejections Under 35 U.S.C. §112, second paragraph:

Applicants have amended the claims to render the claims definite by depending claim 13 from claim 10 and correcting claim 14 to remove reference to "the axis."

Claim Rejections Under 35 U.S.C. §102:

Claims 1 and 2 have been rejected under 35 U.S.C. §102 as anticipated by Yano et al. '556.

In each of Applicant's claims, Applicants recite that the fluid claimed by the second filter element (the bottom filter element) has a spiraling motion as the fluid from the second filter element enters the hollow core of the first filter element to mix with the fluid filtered by the first filter element. This limitation occurs in each of the independent claims. Note in Yano et al. '556 that the fluid exiting from the pipe 358 is injected axially into the fluid filtered by the first fluid element 327. There is no spiral motion to encourage intermixing of the fluids in Yano et al. '556 as is the case in each of Applicant's independent claims 1, 8, 18 and 23. Rather, in Yano et al. '556, the fluid is injected only axially from the second core space 340 into the first core space by the tube 358. Note that most of the fluid in the second core space 340 of Yano et al. flows down a pipe 334 into an outlet 364 and does not mix at all with the fluid from the first filter element 327. Since a 35 U.S.C. §102 rejection requires that all claim limitations occur in a single reference, it is respectfully requested that the rejection of claims 1 and 2 based on Yano et al. '556 be withdrawn.

Claim Rejections Under 35 U.S.C. §103:

Claim 14 has been rejected under 35 U.S.C. §103(a) as being unpatentable over the embodiment of Fig. 15 of Yano et al. '556 in view of the embodiment of Fig. 6 of Yano et al. '556. Applicant respectfully traverses this rejection. Yano et al. '556 does not disclose imparting a spiraling motion to the fluid filtered by the second filter element and injecting the spiraling fluid into the fluid filtered by the first filter element. There is absolutely no teaching or suggestion anywhere in Yano et al. of this concept. Rather, Yano et al. takes a portion of the fluid filtered by the second filter element and injects it only axially into the fluid filtered by the first filter element. Accordingly, no embodiment of Yano et al. '556 teaches Applicant's claimed invention.

Claims 1-17 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Yano et al. '556 in view of Lynch et al. '850. Applicant respectfully traverses this rejection for essentially the same reasons as the previous rejections under 35 U.S.C. §102 and §103 have been traversed.

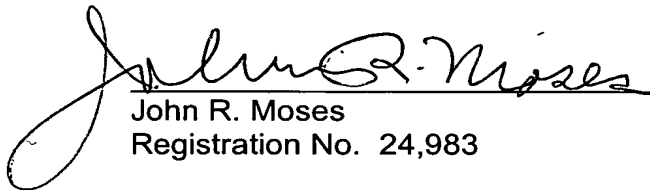
Whatever else Lynch et al. '850 teaches, Lynch et al. does not teach a deflector element for imparting a spiraling motion to fluid filtered by the second or bottom filter element in which the spiraling fluid from the second filter element spirals into the fluid from the first element in order to cause mixing of the fluids. Therefore, Lynch et al. '850 does not cure the deficiencies of Yano et al. as a reference against applicant's claims. Again, Yano et al. merely injects a small portion of the fluid filtered by the bottom filter element 326 axially into the fluid filtered by the top filter element 327 with no rotational or spiraling component into the fluid filtered by the first filter element.

For the aforementioned reasons, it is respectfully requested that the rejections based upon Yano et al. '556 and Lynch et al. '850 be withdrawn with respect to the initially pending claims 1 and 8-17 and with respect to the new claims 8-28 presented in this Amendment.

In that this is a full and complete response to the Office Action of October 1, 2003, it is respectfully requested that this application be allowed and passed to issue. If the Examiner for any reason feels a personal conference with Applicants' attorneys might expedite prosecution of this application, the Examiner is respectfully requested to telephone the undersigned locally.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,



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